SUMMARY OF THE INVENTION

Briefly and in general terms, the present invention provides a new and improved system and method for providing the user safe, practical, portable and very enjoyable Laser Beam based group and individual activities that can be played both inside and outside the house.

In one embodiment, the system includes a conventional laser beam device with built-in controls for manually changing the blanking frequency of the beam, and the ability to detect beam interference. The system can also store the number of beam cycles between interferences. The system further includes a telescopic vertical measurement pole, manually adjustable to any height (generally based on the required difficulty level of the activity). The system also includes a beeper that alerts the user to the start of the activity and a buzzer that alerts the user to his interference with the laser beam (defined as a failure in one type of activity or success in another, depending on the predefined rules of that activity).

In the second embodiment, the aforementioned laser beam device is placed inside a rotating base. By rotating the base, the laser device provides a different, laser beam based activity. The system with the rotating base can be placed on the ground at the center of a players' circle, so that players can jump over the rotating laser beam to avoid interference. The same system can also be elevated (i.e. on top of a table) so that players seated around the table must raise their hands to selectively skip and interfere with rotating beams passing over their heads.

The above objects and advantages of the present invention, as well as others, are described in greater details in the following description, in conjunction with the accompanying drawings of illustrative embodiments.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of preferred embodiment of a Laser Beam Toy.

FIG. 2 is a perspective view of the rotating base which is used in the second embodiment of the Laser Beam Toy.

FIG. 3 is a perspective view of preferred embodiment inside the rotating base tilted and supported by the foldable legs attached to the rotating base.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The present invention is directed to an improved system and method for providing a safe and portable laser beam based device for use in the fitness and recreational fields; for individual and group activities inside and outside the house. The laser beam device itself does not contain mechanically rotating or moving parts, nor does it require connection to electrical power. The system can be easily assembled and moved from place to place to provide very enjoyable recreation activities. The preferred and other embodiments of the improved system and method are fully and detailed illustrated and described in the following paragraphs.

In the drawings, wherein like reference numerals denote like or corresponding parts throughout the drawing figures, systems **10** and **12** provide safe, efficient, portable and very enjoyable laser beam based fitness and recreational activities.

A preferred embodiment **10** of the present invention as illustrated in FIG. 1 comprises the laser device body **20** with a built in counter **24** to display successful user jumps (when the beam cycles without interference), beeper **28** which alerts users to the start of an activity, and buzzer **26** which goes off upon laser beam interference. The system **10** further comprises an activation switch **42** for selection of single or multiple laser beams to be used in the provided activity, a laser beam cycle frequency control **44**, a button to restart or reset the activity, a counter display push button **46**, and an ON/OFF switch **45**. The body **20** has built-in space **36** for a conventional battery. The system **10** further includes a telescopic vertical pole **30** which connects to the body **20** by a pole holder **34**. Two sliding laser beam bases **22**, including the laser beam eye **32** that can be adjusted to any angle, are placed on the vertical pole **30**. A wire **40** provides the connection between the electrical board and the laser beam angle adjustable eyes **32** through holes **38** in the body **20**.

As illustrated in FIG. 2, a second embodiment in accordance with the present invention **12** comprises a disk like rotating body **52** which is attached to the stability base **50**. The disk body **52** has a built-in cavity **54** to hold the laser beam system and rotating security bracket **56** to secure the laser beam system when it is inserted into the matching cavity **54**.

Referring to FIG. 1, a method for using a preferred embodiment of the system **10** enables a user to participate in a laser beam based fitness or recreational activity by shooting periodic laser beams. The system **10** has a manually operated ON/OFF switch **45** comfortably located on top of the device body **20**, an activity restart push button **46** to reset an activity to its initial state, and a digital counter **24**. A multiple laser eyes switch **42** defines how many laser eyes will be used in the activity, and can be used in conjunction with a laser beam cycle frequency control **44** to adjust the difficulty level of the activity. The system **10** further includes a built-in electronic beeper **28** that alerts participants to the start of an activity, and a built-in electronic buzzer **26** to alert participants when they interfere with a laser beam.

The laser beam device body **20** has a built-in battery place **36**. A telescopic vertical measurement pole **30**, the vertical height of which can be adjusted depending on the type of activity desired, is attached to the body **20** by a poll holder **34**. Laser beam bases **22**, that include adjustable to any angle laser eyes **32**, are located on the vertical pole **30** and can be manually adjusted to required height, based on the pole's **30** measurement marks. The wire **40** runs between the battery and the laser beam bases through holes **38** in the device body **20**.

Referring to FIG. 2; in a method for the use of a second embodiment of the present invention, the system **12** provides a disk-like rotating body **52** attached to a stability base **50**. System **12** is used when the participants require a rotating laser beam for their activity, on the ground or elevated (i.e. by placing the system on a table). System **12** has a built in matching cavity **54** so that the laser beam system **10** may be placed tightly into it, and a rotating security bracket **56** to secure the laser device system **10**. Rotating base **52** rotates electronically about its horizontal axis, atop the static stability base **50**, thereby rotating the laser beam device.

In view of the above, it is apparent that the system and method of the preferred embodiments of the present invention enhance substantially the practicality and effectiveness of enabling a device for laser beam based fitness and recreational activities. The system and the method further enable difficulty level adjustment and successful digital laser beam counting.

While the present invention has been described in connection with the specific embodiments identified herein, it will be apparent to those skilled in the art that many alternatives, modifications and variations are possible in light of the above description. Accordingly, the invention is intended to embrace all such alternatives, modifications and variations as may fall within the spirit and scope of the invention disclosed herein.